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|--|---|---|
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 | | ATTORNEY'S DOCKET NUMBER 7875-012 |
| | | U.S. APPLICATION NO. (if known) see 37 CFR 1.5) 10/577522 |
| INTERNATIONAL APPLICATION NO. PCT/EP2004/053158 | INTERNATIONAL FILING DATE 29 November 2004 | PRIORITY DATE CLAIMED 28 November 2003 |
| TITLE OF INVENTION A METHOD FOR PRODUCING A REPLICATION MASTER, REPLICATION METHOD AND REPLICATION MASTER | | |
| APPLICANT(S) FOR DO/EO/US Peter HOCHQJ; Ralf SIEBRECHT; Sergio RODRIGUES | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | |
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST-submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). | | |
| Items 11 to 20 below concern document(s) or information included: | | |
| <ol style="list-style-type: none"> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. (Please enter the attached preliminary amendment before calculating fees) 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). | | |

AP2004053158 27 APR 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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|---|--------------|---|---------|---------------------------------------|----|
| U.S. APPLICATION NO. (if known, see 37 CFR 1.5) | | INTERNATIONAL APPLICATION NO. PCT/EP2004/053158 | | ATTORNEY'S DOCKET NUMBER 7875-012 | |
| <p>10/577522</p> <p>20. Other items of information: Transmittal letter; form PTO-2038; return receipt postcard</p> | | | | | |
| The following fees have been submitted | | | | CALCULATIONS PTO USE ONLY | |
| 21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a))..... \$300 | | | | \$ 300 | |
| 22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) | | | | | |
| If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 | | | | \$ 200 | |
| All other situations.....\$200 | | | | | |
| 23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) | | | | | |
| If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0 | | | | | |
| Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....\$100 | | | | \$ 400 | |
| International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB..... \$400 | | | | | |
| All other situations.....\$500 | | | | | |
| TOTAL OF 21, 22 and 23 = | | | | \$900 | |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. | | | | | |
| Total Sheets | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE | | |
| - 100 = | /50 = | | x \$250 | \$ 0 | |
| Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). | | | | \$ 0 | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | |
| Total claims | 31 - 20 = | 11 | x \$ 50 | \$ 550 | |
| Independent claims | 3 - 3 = | 0 | x \$200 | \$ 0 | |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) | | | + \$360 | \$ 360 | |
| TOTAL OF ABOVE CALCULATIONS = | | | | \$ 1810 | |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. | | | | | |
| SUBTOTAL = | | | | \$ 905 | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). | | | | \$ 0 | |
| TOTAL NATIONAL FEE = | | | | \$ 905 | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property | | | | \$ 0 | |
| TOTAL FEES ENCLOSED = | | | | \$ 905 | |
| | | | | Amount to be refunded: | \$ |
| | | | | Amount to be charged | \$ |

10/577522

PTO-1390 (Rev. 07-2005)

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- a. ☐ A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 13-1703. A duplicate copy of this sheet is enclosed.
- d. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Stephen S. Ford
Marger Johnson & McCollom, P.C.
210 SW Morrison Street, Suite 400
Portland, OR 97204
US

SIGNATURE

Stephen S. Ford

NAME

35,139

REGISTRATION NUMBER

10/577522

AP20 Rec'd PCT/PTO 27 APR 2006

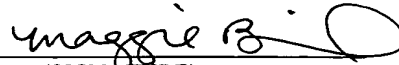
PATENT APPLICATION
Attorney's Do. No. 7875-012

EXPRESS MAIL

MAILING LABEL NO. EV 857060431 US
DATE OF DEPOSIT: APRIL 27, 2006

I HEREBY CERTIFY THAT THIS PAPER AND ENCLOSURES AND/OR FEE ARE BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE" SERVICE UNDER 37 CFR 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO: MAIL STOP PCT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 20231.

MAGGIE BAIRD
(SENDER'S PRINTED NAME)


(SIGNATURE)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
U.S. RECEIVING OFFICE (RO/US)

In Re: International Application
No. PCT/EP2004/053158

Filed: 29 NOVEMBER 2005

Applicant: XENOCS S.A. and Peter HOGHOJ, Ralf SIEBRECHT,
Sergio RODRIGUES

Title of Invention: A METHOD FOR PRODUCING A REPLICATION MASTER,
REPLICATION METHOD AND REPLICATION MASTER

Agent's File Ref.: 7875-012

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Transmittal Letter

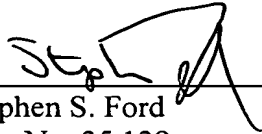
Enclosed for filing regarding the above-referenced International Application are the following:

- ☒ Transmittal letter to U.S. Designated Office (DO/EO/US) concerning filing Under 35 U.S.C. 371 (PTO-1390)
- ☒ Published PCT Application, WO 2005/051626 A1, specification (20 pgs.), 21 claims (4 pgs.); drawings (4 sheets), Search Report (3 pages); Remarks in Response to Search Report (3 pgs)
- ☒ Combined Declaration and Power of Attorney (3 pgs)
- ☒ Information Disclosure Statement with Form PTO 1449 and cited references
- ☒ Applicant claims small entity status (see 37 CFR 1.27)
- ☒ PTO Form 2038 authorizing credit card payment of \$905.00 for filing, examination, search fees, and extra claims for a small entity

10/577522

- APR 20 2006 10:10:10 27 APR 2006
- ☒ Preliminary Amendment Transmittal letter (1 pg.)
 - ☒ Preliminary Amendment (**PLEASE ENTER PRELIMINARY AMENDMENT BEFORE CALCULATING FEES FOR APPLICATION**)
 - ☒ Any deficiency or overpayment should be charged or credited to deposit account number 13-1703. A duplicate copy of this sheet is enclosed.

Respectfully submitted,



Stephen S. Ford
Reg. No. 35,139

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Portland, OR 97204
(503) 222-3613
Customer No. 20575

10/577522

BETTEN & RESCH ~~IPC/PTO~~ 27 APR 2006

BETTEN & RESCH Postfach 10 02 51 D-80076 München

European Patent Office

80298 Munich

June 8, 2005

European Patent Application No. EP 03354086.5
"A method for producing a replication master, ..."
XENOCSS SA
Our File: XEN 011 EP GR/MR

Patentanwälte
European Patent Attorneys
European Trademark Attorneys
European Design Attorneys

Jürgen Betten
Dipl.-Ing.
Franz-Josef Schöniger
Dipl.-Phys.
Dr. Alexander Esslinger
Dipl.-Phys.
Dirk C. Sieckmann
Dipl.-Ing.
Dr. René Günther
Dipl.-Phys.

Dott. Isabella Peiker-Giannotti
European Trademark Attorney
European Design Attorney

In response to the notification of April 20, 2005:

The applicant requests examination of his European patent application and designates all contracting states. The corresponding fees are paid by collective remittance.

Furthermore the applicant submits a PACE request with the enclosed separate form.

In order to facilitate examination the applicant would kindly like to comment on the extended European search report of June 24, 2004, as follows:

- a) As it has already been pointed out in the applicant's letter to the EPO dated July 21, 2004, the lack of unity objections raised by the Search Division are not justified. It is therefore kindly requested to refund the additional search fees which have been paid.

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- b) As to the "X" classification of document US 4690370 A (D1) and the corresponding novelty objection raised by the EPO in section 2.1 of the extended European Search Report, the applicant kindly wishes to contradict this analysis as follows:

The characterising part of independent claim 1 reads:

*"characterised in that said method comprises the step of coating at least a part of said master with a **smoothing** layer"*

As defined on page 3, line 4 of the originally filed description,

"this smoothing layer is a layer which due to a certain flowability of its material displays a smaller roughness at its top surface than the surface on which it has been grown, in contrast to for example ordinary metallic monolayers ..."

Taking this definition of a smoothing layer into consideration it will be seen that document D1 does not disclose a **smoothing** layer, but instead only discloses a smooth layer which is grown on top of a smooth surface. Document D1 does therefore not disclose the features of the characterising part of claim 1. In detail:

Document D1 teaches to provide a surface coating 34 on a surface portion 32 of a mold 24. This surface coating may be provided by sputtering (see for example column 2, line 16).

Document D1 repeatedly emphasises that the roughness on top of the surface coating 34 is exactly identical to the roughness of the surface portion 32 on which it has been grown, see for example column 1, line 57 to 65, column 2, first paragraph, column 2, lines 13 – 19, column 4, lines 20 – 31 as well as claims 1 and 4 of D1. All of these passages repeatedly point out that the surface

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roughness values of the surface portion 32 and its surface coating 34 on top are absolutely identical, amounting to $12,5 \times 10^{-8}$ meters RMS.

In particular the passage in column 4, lines 26 – 31 makes clear that this surface roughness value of the "substrate" is obtained

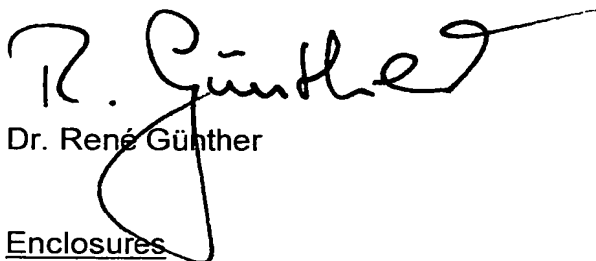
"by smoothing the surface portion 32 of the mold 24 until it has a roughness of no more than about $12,5 \times 10^{-8}$ meters RMS".

When this roughness value is obtained, the surface coating 34 is grown on the surface portion by sputtering. The final surface roughness, however, is not at all changed by the provision of the surface coating.

In other words, the surface coating 34 proposed in D1 is smooth (at least in the sense of D1) because it is grown on a smooth substrate, but it does not at all actively help to improve the surface roughness value of the mold.

This provision of this **smooth** layer on a smooth substrate has nothing to do with the idea to provide a **smoothing** layer which actively contributes to improving the surface roughness of a replication master according to the invention.

Only as a side remark the applicant would kindly like to point out that prior art document D2 which has also briefly been discussed in the extended European search report does not give the slightest hint as to such a smoothing layer, either.


Dr. René Günther
Enclosures

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

10/577522

APR 20 2006
PTO 27 APR 2006

Inventor(s): Peter Hoghoj, Ralf Siebrecht, Sergio Rodrigues

Serial No.: not yet assigned

Examiner: not yet assigned

Filing Date: Herewith

Group Art Unit: not yet assigned

Title: A METHOD FOR PRODUCING A REPLICATION MASTER,
REPLICATION METHOD AND REPLICATION MASTERCommissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Prior to examination, enter the attached preliminary amendment. **Please enter attached preliminary amendment prior to calculation of fees for application.**

The fee has been calculated as shown below.

| CLAIMS AS AMENDED | | | | | |
|---|------------------------|-----------------|-------|-------------|----------------|
| For: | Number After Amendment | Previous Number | Extra | Rate | Additional Fee |
| Total Claims | 31 | -20* | 11 | 11 x \$25 = | \$275.00 |
| Independent Claims | 3 | -3** | 0 | x \$100 = | \$0.00 |
| First Presentation of Multiple Dependent Claims | | | | | \$180.00 |
| TOTAL ADDITIONAL FEE FOR THIS AMENDMENT | | | | | \$455.00 |

*greater of twenty (20) or number for which fee has been paid

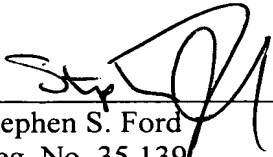
**greater of three (3) or number for which fee has been paid

- ☒ PTO Form 2038 authorizing credit card payment for the above-listed fees is enclosed.
☒ Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.

Customer No. 20575

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.


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